

REMARKS/ARGUMENTS

Claims 1-29 are pending in the present application.

This Amendment is in response to the Office Action mailed October 20, 2008. In the Office Action, the Examiner rejected claims 1-29 under 35 U.S.C. §103(a). Reconsideration in light of the remarks made herein is respectfully requested.

Rejection Under 35 U.S.C. § 103

In the Office Action, the Examiner rejected claims 1-3, 5, 8, 10-15, 20-22, and 28 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,621,870 issued to Gordon et al. ("Gordon") in view of U.S. Publication No. 2002/0059623 issued to Rodriguez et al. ("Rodriguez"); claims 6, 7, 9, 17-19, 26, and 27 under 35 U.S.C. §103(a) as being unpatentable over Gordon in view of Rodriguez as applied to claims 5, 8, 13, and 22 above, and further in view of U.S. Patent No. 6,118,976 issued to Arias et al. ("Arias"); claims 4, 16, and 23-25 under 35 U.S.C. §103(a) as being unpatentable over Gordon in view of Rodriguez as applied to claims 1, 13, and 22 above, and further in view of U.S. Patent No. 7,065,779 issued to Crocker et al. ("Crocker"); claim 29 under 35 U.S.C. §103(a) as being unpatentable over Gordon in view of Rodriguez as applied to claim 28 above, and further in view of U.S. Patent No. 6,882,793 issued to Fu et al. ("Fu"). Applicant respectfully traverses the rejection and submits that the Examiner has not met the burden of establishing a *prima facie* case of obviousness.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *MPEP §2143, p. 2100-126 to 2100-130 (8th Ed., Rev. 5, August 2006)*. Applicant respectfully submits that there is no suggestion or motivation to combine their teachings, and thus no *prima facie* case of obviousness has been established.

Furthermore, the Supreme Court in *Graham v. John Deere*, 383 U.S. 1, 148 USPQ 459 (1966), stated: "Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of

ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined.” MPEP 2141. In *KSR International Co. vs. Teleflex, Inc.*, 127 S.Ct. 1727 (2007) (Kennedy, J.), the Court explained that “[o]ften, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” The Court further required that an explicit analysis for this reason must be made. “[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *KSR* 127 S.Ct. at 1741, quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006). In the instant case, Applicant respectfully submits that there are significant differences between the cited references and the claimed invention and there is no apparent reason to combine the known elements in the manner as claimed, and thus no *prima facie* case of obviousness has been established.

1. Claims 1-3, 5, 8, 10-15, 20-22, and 28:

Gordon discloses a method and apparatus for compressing video sequences. An information distribution system 100, e.g., a video-on-demand system or digital cable system, contains service provider equipment (SPE) 102, a distribution network 104 and subscriber equipment (SE) 106 (Gordon, col. 4, lines 14-21). An encoding and multiplexing unit 116 in the SPE 102 produces a transport stream comprising a plurality of encoded video, audio, and data elementary streams (Gordon, col. 5, lines 23-27). The video sequences V1-V10 are coupled to respective real time encoders 220. Each encoder 220 encodes a composited interactive program guide (IPG) screen sequence to form a corresponding compressed video bit stream (Gordon, col. 6, lines 14-17). A packetizer assigns a packet identification (PID) to each of the packets representing information from the stream (Gordon, col. 8, lines 6-9).

Rodriguez discloses a digital subscriber television networks with local physical storage devices and virtual storage. A headend 26B receives content from a variety of service and content providers 18. The headend 26B combines the content from the various sources and distributes the content to subscribers via distribution network 38 (Rodriguez, paragraph [0038],

lines 6-11). The various inputs into the headend 26B are then combined with the other information from the control system 232, which is specific to the DBDS 10, such as local programming and control information, which can include conditional access information (Rodriguez, paragraph [0042], lines 1-5).

Gordon and Rodriguez, taken alone or in any combination, do not disclose or render obvious, at least one of: (1) assigning a unique process identification number (PID) to a frequency band used by each of a plurality of multimedia content providers, (2) simultaneously receiving a plurality of data segments from the plurality of multimedia content providers, wherein the data segments are tracked using the PID assigned to the frequency band used by each multimedia content provider; (3) reconstructing a multimedia asset package transmitted by the multimedia content provider by compiling the plurality of data segments that constitute the multimedia asset package; (4) providing the multimedia asset package to a video-on-demand server that transmits at least a portion of the multimedia asset package to an end user, as recited in claim 1; (5) validating the complete multimedia asset to confirm successful receipt of the complete multimedia asset, as recited in claim 13; and (6) a content management system to receive multimedia asset packages from the receive unit, manage the received multimedia asset packages, and provide the multimedia asset packages to a multimedia server, as recited in claim 22.

First, Gordon merely discloses a predicted frame stream being assigned a packet identifier (PID) code and other streams being each assigned their own separate PIDs (Gordon, col. 2, lines 60-62), not a process identification number assigned to a frequency band used by each of a plurality of multimedia content providers. Gordon's PID refers to the ID of a packet. Gordon specifically discloses that the PID field contains thirteen bits and uniquely identifies each packet that contains a portion of a stream of video information as well as audio information and data (Gordon, col. 8, lines 49-50). A packet is merely a portion of the stream. Therefore it is not the frequency band used by a content provider. The frequency band is used by the content provider to transmit a multimedia asset package.

Second, Gordon merely discloses an interactive program guide (IPG) display 900 comprising a plurality of channel content objects 910-1 through 910-8 (Gordon, col. 14, lines 30-31; Fig. 9), not simultaneously receiving a plurality of data segments from the plurality of

multimedia content providers, wherein the data segments are tracked using the PID assigned to the frequency band used by each multimedia content provider. The channel content objects 910-1 through 910-8 merely shows the various programs from different channels that are available during time slot objects 905A, 905B, and 905C (Gordon, col. 14, lines 29-31; Fig. 9). These programs are not data segments that are tracked using the PID assigned to the frequency band used by each multimedia content provider.

The Examiner admits that Gordon does not disclose reconstructing a multimedia asset package and providing the multimedia asset package to a video-on-demand server (Office Action, page 3, lines 4-8), but contends that Rodriguez discloses these elements, citing paragraphs [0038] and [0042] (Office Action, page 3, lines 9-12). Applicant respectfully disagrees for the following reasons. For ease of reference, the cited excerpts are copied below.

“FIG. 3B is a block diagram of select portions of an example headend for providing broadcast services. Note that the headend components illustrated in FIG. 3A and FIG. 3B are equally applicable to a hub 34, and the same elements and principles may be implemented at a hub 34 instead of the headend 26 as described herein. The headend 26B receives content from a variety of service and content providers 18, which can provide input in a variety of ways. **The headend 26B combines the content from the various sources and distributes the content to subscribers via distribution network 38.**” (Rodriguez, paragraph [0038], *emphasis added.*)

“**The various inputs into the headend 26B are then combined with the other information from the control system 232,** which is specific to the DBDS 10, **such as local programming and control information,** which can include among other things conditional access information. The headend 26B contains one or more modulators (or QAM Group) 228 to convert the received transport streams 240 into modulated output signals suitable for transmission over the transmission medium 250 through the network 38. Each modulator 228 may be a multimodulator including a plurality of modulators, such as, but not limited to, QAM modulators, that radio frequency modulate at least a portion of the input the transport streams 240 and transmit therefrom output transport streams 242. **The output signals 242 from the various modulators 228 or multimodulators are combined, using equipment such as a combiner 230, for input into the transmission medium 250, which is sent via the in-band**

delivery path 254 to the subscriber locations (not shown).”
(Rodriguez, paragraph [0042], *emphasis added*.)

As seen from the above excerpts, Rodriguez merely discloses the headend 26B combines the content from the various sources and distributes the content to subscribers via distribution network 38 (Rodriguez, paragraph [0038], lines 6-11), or the various inputs into the headend 26B are combined with the other information such as local programming and control information (Rodriguez, paragraph [0042], lines 1-5). None of these is related to reconstructing a multimedia asset package transmitted by the multimedia content provider by compiling the plurality of data segments that constitute the multimedia asset package; or providing the multimedia asset package to a video-on-demand server. Combining content from various source is not the same as reconstructing a multimedia asset package. The combiner 246 shown in Figure 3B merely combines the output signals 242 from the various modulators 228 for input into the transmission medium 250 (Rodriguez, paragraph [0042], lines 14-19). Therefore, the output of the combiner 246 is merely a combined signal, not a multimedia asset package. Furthermore, the combining is merely a signal combining, such as using an adder, not by compiling the plurality of data segments that constitute the multimedia asset package.

Moreover, Rodriguez merely discloses sending the combined content via the in-band delivery path to the subscriber location (Rodriguez, paragraph [0042], lines 17-19), not providing the multimedia asset package to a video-on-demand server. Rodriguez specifically discloses a server 216 including video-on-demand placed before the headend 26B (Rodriguez, Figure 3B; paragraph [0041], lines 3-6). Therefore, the headend 26B cannot provide the combined content to the video-on-demand server.

Regarding claim 13, the Examiner admits that Gordon does not disclose validating the complete multimedia asset to confirm successful receipt of the complete multimedia asset and providing the multimedia asset package to a video-on-demand server (Office Action, page 4, fourth paragraph), but contends that Rodriguez discloses these elements, citing paragraphs [0039], [0038] and [0042] (Office Action, page 3, fifth paragraph). Applicant respectfully disagrees for the following reasons. For ease of reference, the cited excerpt (paragraph [0039]) is copied below.

“In a typical system, **the headend 26B receives input signals such as programming, services and other information from content providers 18** (FIG. 1). The input signals may be transmitted from sources to the headend 26B via a variety of transmission paths, including satellites (not shown), and terrestrial broadcast transmitter and antenna, (not shown). The headend 26B can also receive content from a direct feed source 210 via a direct line 212. Other input sources from content providers 18 include a video camera 214 or an application server 216. Application server 216 can also be located at the headend 26B, among other locations. The application server 216 may include more than one line of communication 218. The signals provided by the content or programming input sources can include a single program or a multiplex that includes several programs.” (Rodriguez, paragraph [0039], *emphasis added*.)

As seen from the above excerpt, Rodriguez merely discloses the headend 26B receives input signals such as programming, services and other information from content providers 18 (Rodriguez, paragraph [0039], lines 1-3), not validating the complete multimedia asset to confirm successful receipt of the complete multimedia asset. Receiving does not mean validating. One may receive something without validating it. Validating includes examining the appended error tracking code to determine whether the asset was successfully received. Furthermore, receiving the input signals does not mean that the complete multimedia asset is successfully received.

Regarding claim 22, the Examiner merely asserts that Rodriguez discloses a content management system, citing paragraph [0023] (Office Action, page 6, last paragraph). Applicant respectfully disagrees. For ease of reference, the cited excerpt is copied below.

“The Content Provider 18 transmits the content to a headend 26 for further transmission to subscribers downstream in the DBDS 10. Also in communication with the headend 26 is **a Network Operation Center (NOC) 22, which is an external management center interfaced with the DBDS 10 to allow for the remote operation of the system.**” (Rodriguez, paragraph [0023], *emphasis added*.)

As seen from the above excerpt, Rodriguez merely discloses a Network Operation Center (NOC) 22 to allow for the remote operation of the system (Rodriguez, paragraph [0023], lines 3-6), not to manage the received multimedia asset packages, and provide the multimedia asset

packages to a multimedia server. Allowing for remote operation does not involve managing the received multimedia asset package.

2. Claims 6, 7, 9, 17-19, 26, and 27:

Gordon and Rodriguez are discussed above.

Arias discloses an asymmetric data communications system. Messages from subscriber 30 are transmitted via PSTN lines 40 to a return path facility 50 (Arias, col. 5, lines 49-54). Messages can be sent by program subsystem 10 to return path facility such as to acknowledge an authorization request (Arias, col. 7, lines 19-22).

Gordon, Rodriguez, and Arias, taken alone or in any combination, do not disclose or render obvious, at least one of: (1) – (3) as above, (4) providing acknowledgements of receipt of a multimedia asset package to the multimedia content provider using the backchannel connection, as recited in claims 6, 17, and 26; and (5) the backchannel connection is a network connection chosen from the group consisting of an internet connection, a public switched telephone network (PSTN) connection, and a virtual private network (VPN) connection, as recited in claims 7, 18, and 27; and (6a) receiving metadata that accompanies the data segments of the multimedia asset package, and (6b) analyzing the metadata to determine whether the complete multimedia asset package is received, as recited in claim 9.

As discussed above, Gordon and Rodriguez, taken alone or in any combination, do not disclose or render obvious (1) – (3) above. Accordingly, a combination of Gordon and Rodriguez with any other references in rejecting claims 6-9, 17-18, and 26-27, which depend on claims 1, 13, and 22, respectively, is improper.

Furthermore, Arias merely discloses messages can be sent by program subsystem 10 to return path facility such as to acknowledge an authorization request (Arias, col. 7, lines 19-22), not providing acknowledgements of receipt of a multimedia asset package to the multimedia content provider. An authorization request is a request for authorization for requested programming (Arias, col. 7, lines 7-10). It is not a receipt of a multimedia asset package. A request for authorization means that the requested programming has not been authorized. Therefore, the program cannot be delivered. Since it cannot be delivered, it cannot be received. Accordingly, an acknowledgement of a request for authorization is not the same as an

acknowledgement of receipt of a multimedia asset package. Moreover, the acknowledgement of an authorization request is to send to the subscriber, not to the multimedia content provider.

Regarding the PSTN, it is used for messages from subscriber 30 to a return path facility 50 (Arias, col. 5, lines 49-54). Accordingly, it is not used to provide acknowledgements to the multimedia content provider.

Regarding receiving metadata and analyzing the metadata, Arias merely discloses requests for authorization, or input received over the link 52 being processed, managed, and stored by processor 24 (Arias, col. 7, lines 10-12; lines 15-19). None of these involves the use of metadata. Furthermore, none of these is related to determining whether the complete multimedia asset package is received.

3. Claims 4, 16, and 23-25:

Gordon and Rodriguez are discussed above.

Crocker discloses a technique for synchronizing multiple access controllers at the head end of an access network. A Cable Modem Termination System (CMTS) 210 includes a plurality of physically distinct line cards. Each line card provides a separate interface for communicating with a specific group of cable modems in the network (Crocker, col. 5, lines 62-66). A synchronization circuitry 350 causes each of the timestamp counters within each respective MAC controller to be in synchronization. Accordingly, cable modem CM1 (361) is able to use the timestamp message on downstream channel B (323b) to communicate with the upstream receivers 305 on line card A (Crocker, col.11, lines 27-33).

Gordon, Rodriguez, and Crocker, taken alone or in any combination, do not disclose or render obvious, at least one of: (1) – (3) as above, (7) receiving data segments from each multimedia content provider using a separate data receiver card for each frequency band used by each content provider, as recited in claims 4, 16, 23-25.

As discussed above, Gordon and Rodriguez, taken alone or in any combination, do not disclose or render obvious (1) – (3) above. Accordingly, a combination of Gordon and Rodriguez with any other references in rejecting claims 4, 16, and 23-25, which depend on claims 1, 13, and 22, respectively, is improper.

Furthermore, Crocker merely discloses line cards that provide a separate interface for communicating with a specific group of cable modems in the network (Crocker, col. 5, lines 62-

66), not a separate data receiver card for each frequency band used by each content provider. Crocker specifically disclose line card A 202 includes a distinct group of ports (e.g., 205, 212) for communicating with cable modem Group A 260a, and line card B includes a separate distinct group of ports (e.g., 225, 222) for communicating with cable modem Group B 260b (Crocker, col. 5, line 66 – col. 6, line 4). In other words, the line card merely contains interface ports connected to different cable modems. Each line card is typically assigned to a separate DOCSIS domain, which is a collection of downstream and upstream channels for which a single MAC Allocation and Management protocol operates (Crocker, col. 2, lines 36-41). The DOCSIS domain has no distinction of which content provider providing the content transmitted on the channel. The line cards therefore do not operate according to the frequency bands assigned to the content providers.

4. Claim 29:

Gordon and Rodriguez are discussed above.

Fu discloses a video processing system. A production system 90 produces a published version of a selected album (Fu, col. 4, lines 54-55). An information stream can be produced to deliver a version of the content to the distributees. The information stream can be delivered by a delivery system such as the World Wide Web using an internet enabled set top box (using the file transfer protocol ftp), DVD player or personal computer, a cable system incorporating a video-on-demand set top box, or satellite system (satellite narrowcast) (Fu, col. 4, line 62 – col. 5, line 3).

Gordon, Rodriguez, and Fu, taken alone or in any combination, do not disclose or render obvious, at least one of: (1) – (3) as above, (8) at least one data input unit taken from the group consisting of a digital versatile disk (DVD)-based drive and a file transfer protocol (FTP) server interface, as recited in claim 29.

As discussed above, Gordon and Rodriguez, taken alone or in any combination, do not disclose or render obvious (1) – (3) above. Accordingly, a combination of Gordon and Rodriguez with any other references in rejecting claim 29 which depend on claim 22 is improper.

Furthermore, Fu merely discloses the information stream can be delivered by a delivery system using the file transfer protocol ftp, DVD player or personal computer (Fu, col. 4, lines 63-66), not at least one data input unit taken from the group consisting of a digital versatile disk

(DVD)-based drive and a file transfer protocol (FTP) server interface. The information is transmitted by a delivery system, not received by a receive unit. In contrast, claim 29 recites a data input unit which is part of a receive unit.

The Examiner failed to establish a prima facie case of obviousness and failed to show there is teaching, suggestion, or motivation to combine the references. When applying 35 U.S.C. 103, the following tenets of patent law must be adhered to: (A) The claimed invention must be considered as a whole; (B) The references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination; (C) The references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention; and (D) Reasonable expectation of success is the standard with which obviousness is determined. *Hodosh v. Block Drug Col, Inc.*, 786 F.2d 1136, 1143 n.5, 229 USPQ 182, 187 n.5 (Fed. Cir. 1986). "When determining the patentability of a claimed invention which combined two known elements, 'the question is whether there is something in the prior art as a whole suggest the desirability, and thus the obviousness, of making the combination.'" *In re Beattie*, 974 F.2d 1309, 1312 (Fed. Cir. 1992), 24 USPQ2d 1040; *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 1462, 221 USPQ (BNA) 481, 488 (Fed. Cir. 1984). To defeat patentability based on obviousness, the suggestion to make the new product having the claimed characteristics must come from the prior art, not from the hindsight knowledge of the invention. *Interconnect Planning Corp. v. Feil*, 744 F.2d 1132, 1143, 227 USPQ (BNA) 543, 551 (Fed. Cir. 1985). To prevent the use of hindsight based on the invention to defeat patentability of the invention, this court requires the Examiner to show a motivation to combine the references that create the case of obviousness. In other words, the Examiner must show reasons that a skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the prior elements from the cited prior references for combination in the manner claimed. *In re Rouffet*, 149 F.3d 1350 (Fed. Cir. 1996), 47 USPQ 2d (BNA) 1453. "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or implicitly suggest the claimed invention or the Examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." *Ex parte Clapp*, 227 USPQ 972, 973. (Bd.Pat.App.&Inter. 1985). The mere fact

that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). Furthermore, although a prior art device “may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so.” *In re Mills*, 916 F.2d at 682, 16 USPQ2d at 1432; *In re Fritch*, 972 F.2d 1260 (Fed. Cir. 1992), 23 USPQ2d 1780.

Moreover, the Examiner failed to establish the factual inquires in the three-pronged test as required by the *Graham* factual inquires. There are significant differences between the cited references and the claimed invention as discussed above. Furthermore, the Examiner has not made an explicit analysis on the apparent reason to combine the known elements in the fashion in the claimed invention. Accordingly, there is no apparent reason to combine the teachings of Gordon, Rodriguez, Arias, Crocker, and Fu in any combination.

In the present invention, the cited references do not expressly or implicitly disclose any of the above elements. In addition, the Examiner failed to present a convincing line of reasoning as to why a combination of Gordon, Rodriguez, Arias, Crocker, and Fu is an obvious application of multicast media distribution system or an explicit analysis on the apparent reason to combine Gordon, Rodriguez, Arias, Crocker, and Fu in the manner as claimed.

Therefore, Applicant believes that independent claims 1, 13, and 22 and their respective dependent claims are distinguishable over the cited prior art references. Accordingly, Applicant respectfully requests the rejection under 35 U.S.C. §103(a) be withdrawn.

Conclusion

Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

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